

## DAFTAR PUSTAKA

- Adikara, IPA., Winaya, IBO., Sudira, I. W. 2013. Studi Histopatologi Hati Tikus Putih (*Rattus Norvegicus*) yang Diberi EKstrak Etanol Daun Kedondong (*Spondias dulcis G.Forst*) Secara Oral. Buletin Veteriner Udayana. 5(2).
- Adnyana, I.D.P.A., Meles, D.K., Wurlina., Zakaria, S., dan Suwasanti, N. 2016. Efek Anti Diabetes Buah Pare (*Momordica charantia Linn.*) Terhadap Kadar Glukosa Darah, Sel Penyusun Pulau Langerhans dan Sel Leydig pada Tikus Putih Hiperglikemia. Acta Veterinaria Indonesia. 4(2): 43-50
- Akhlaghi, M., and Bandy, B. 2009. Review Article: Mechanisms Of Flavonoid Protection Against Myocardial Ischemia–Reperfusion Injury. Journal Moleccular and Cellular Cardiology. 46: 309–317
- Akira, S., S. Uematsu., O. Takeuchi, 2006. Pathogen recognition and innate immunity. Cell. 124: 783-801.
- Al-Hajj, N.Q.M., M. Algabr., Sharif, H.R., Aboshora, W and H. Wan. 2016. In Vitro And In Vivo Evaluation Of Antidiabetic Activity Of Leaf Essential Oil Of Pulicaria Inuloides Asteraceae. Jurnal Of Food And Nutrition Research. 4(7): 461-470.
- Amanatie, Sulistyowati, E. 2015. Structure Elucidation Of The Leaf Of Tithonia diversifolia (Hemsley) A.Gray. Jurnal Sains dan Matematika. 23(4):101-106.
- American Diabetes Association., 2018. Standards of Medical Care in Diabetes 2018. Diabetes Care. 41(1): 57-5413.
- Ananda, B.S. 2018. Potensi Ekstrak Etanol Bawang Bombay (*Allium cepa L.*) Terhadap Luas Pulau Langerhans Pada Tikus Putih (*Rattus norvegicus*) Yang Diinduksi Aloksan [Skripsi]. Fakultas Kedokteran Hewan. Universitas Airlangga.
- Arfan, P. V. P., dan N. Wijayahadi. 2016. Pengaruh Pemberian Ekstrak Produk X Sebagai Antiinflamasi Pada Tikus Jantan Galur Wistar. Diponegoro Medical Journal (Jurnal Kedokteran Diponegoro). 5(4): 1444-1450.
- Arimbi, Azmijah, A., Darsono, R., Plumeriastuti, H., Thomas, V., dan Legowo, D. 2015. Patologi Umum Veteriner. Airlangga University Press. Surabaya.
- Cahyaningrum P.L., S.A.M. Yuliari., I.B.P. Suta. 2019. Antidiabetic Activity Test Using Amla Fruit (*Phyllanthus Emblica L*) Extract In Alloxan-Induced Balb/C Mice. Journal of Vocational Health Studies. 53–58.

- Chaiyasut, C., Kusirisin, W., Lailerd, N., Lertrakarnnon, P., Suttajit, M., & Srichairatanakool, S. 2011. Effects of phenolic compounds of fermented thai indigenous plants on oxidative stress in streptozotocin-induced diabetic rats. *Evidence-Based Complementary and Alternative Medicine*.
- Chen, G.Y., G. Nunez, 2010. Sterile inflammation: Sensing and reacting to damage. *Nat. Rev. Immunol.* 10: 826-837.
- Chertow, M.G., Elisabeth, B., Melissa, H., Joseph, V.B., David, W.B. 2005. Acute Kidney Injury, Mortality, Length of Stay, and Costs in Hospitalized Patients. *J Am Soc Nephrol.* 16(11): 3365-70.
- Corwin, E.J. 2008. *Handbook of Pathophysiology*, 3<sup>th</sup> edition. Diterjemahkan oleh: Subekti, N.B., Editor edisi Bahasa Indonesia: Yudha, E.K., Wahyuningsih, E., Yulianti, D., dan Karyuni, P.E. 2009. *Buku Saku Patofisiologi*, Edisi ketiga. Jakarta: Penerbit Buku Kedokteran EGC.
- Damasceno, D. C., Netto, A. O., Iessi, I. L., Gallego, F. Q., Corvino, S. B., Dallaqua, B., Sinzato, Y. K., Bueno, A., Calderon, I. M. P., & Rudge, M. V. C. 2014. Streptozotocin-induced diabetes models: Pathophysiological mechanisms and fetal outcomes. *BioMed Research International*.
- Decroli, E. 2019. *Diabetes Melitus Tipe 2*. Universitas Hasanulidin. 30 – 34
- Departemen Kesehatan Republik Indonesia (Depkes RI). 2009. *Farmakope Herbal Edisi Pertama*. Jakarta. Departemen Kesehatan RI.
- Didik, G dan Sulistijowati, A. 1999. Efek Ekstrak Daun Kembang Bulan (*Tithonia diversifolia* A. Gray.) terhadap *Candida albicans* serta Profil Kromatografinya. *Media Litbangkes Edisi Khusus Obat Asli Indonesia*. 8(3): 32-33.
- Direktorat Bina Farmasi Komunitas dan Klinik. 2005. *Pharmaceutical Care untuk Penyakit Diabetes Mellitus*. Jakarta: Direktorat Jenderal Bina Kefarmasian dan Alat Kesehatan Departemen Kesehatan RI.
- El Barky, A.R., Hussein, S.A., Al Eldeen, A.E., Hafez, Y.A., & Mohamed, T., 2017. Saponins and Their Potential Role in Diabetes Mellitus. *Diabetes Management*. 7(1): 148-158.
- Eleazu, C. O., Eleazu, K. C., Chukwuma, S., & Essien, U. N. 2013. Review of the mechanism of cell death resulting from streptozotocin challenge in experimental animals, its practical use and potential risk to humans. *Journal of Diabetes and Metabolic Disorders*. 12(1): 1–7.

- Elodea, J.R. 2018. Uji Aktivitas Antihiperglikemi dan Regenerasi Sel Pankreas Ekstrak Daun Gedi Merah (*Abelmonchus manihot* L. Medik) pada Tikus Diabetes Melitus yang Diinduksi Streptozotocin-Nikotinamid [Skripsi]. Fakultas Farmasi. Universitas Setia Budi. Surakarta
- Elsner, M., Guldbakke, B., Tiedge, M., Munday, R., & Lenzen, S. (2000). Relative importance of transport and alkylation for pancreatic beta-cell toxicity of streptozotocin. *Diabetologia*. 43(12): 1528–1533.
- Elufioye, T., O. Alatise, F. Fakoya, J. Agbedahunsi dan Houghton, P. 2009. Toxicity Studies of *Tithonia diversifolia* A. Gray (Asteraceae) in Rats. *Journal of Ethnopharmacology*. 122: 410-415.
- Eroschenko, V.P. 2008. DiFiore's Atlas of Histology with Functional Correlations. Lippincott Williams & Wilkins.
- Fall, T., Hamlin, H.H., Hedhammar, A., Ka'mpe, O., and Agneta Egenvall. 2007. Diabetes Mellitus in a Population of 180,000 Insured Dogs: Incidence, Survival, and Breed Distribution. *Vet Intern Med*. 21: 1209–1216.
- Faustinawati, B., Saebani., Gatot, S. 2017. Pengaruh Pemberian Ranitidin Terhadap Gambaran Histopatologi Tubulus Proksimal Ginjal Tikus Wistar pada Pemberian Metanol Dosis Bertingkat. *Jurnal Kedokteran Diponegoro*. 6(2): 366-376.
- Firdaus., Rimbawan., Marliyati, S. A., Roosita, K. 2016. Model Tikus Diabetes Yang Diinduksi Streptozotocin-Sukrosa Untuk Pendekatan Penelitian Diabetes Melitus Gestasional. *Jurnal MKMI*. 12(1).
- Firmansyah, D., Bachri, M.S., dan Nurkhasanah. 2016. Pengaruh Pemberian Ekstrak Etanol Dan Kloroform Daun Sirsak Terhadap Kolesterol Total Dan Trigliserida Pada Tikus Yang Diinduksi Aloksan. *Pharmaciana*. (1): 47-54.
- Forbes, J.M., Coughlan, M. T. and Cooper, M.E. 2008. Oxidative stress as a major culprit in kidney disease in diabetes, *Diabetes*. 57(6): 1446-1454.
- Fransisco J.S, Waldo L, Garcia J, Isadora L, Karin S. Histopathological and immunohistochemical characterisation of hepatic granulomas in *Leishmania donovani*-infected BALB/c mice:a time-course study. *Parasites Vector* J.11(73): 1–9.
- Garnita, D. 2012. Faktor Resiko Diabetes Melitus Tipe 2 di Puskesmas Citangkil dan Puskesmas Kecamatan Pulo Merak Kota Cilegon. Fakultas Kesehatan Masyarakat Progan Studi Sarjana Reguler Kesehatan Masyarakat Departemen Biostatiska dan Kependudukan Depok Universitas Indonesia. 1(102).

- Hall, J.E. 2015. Guyton and Hall Textbook of Medical Physiology e-Book. Elsevier Health Sciences.
- Hardiningtyas, S. D., Purwaningsih, S., dan Handharyani, E. 2014. Aktivitas Antioksidan dan Efek Hepatoprotektif Daun Bakau Api-Api Putih. Jurnal Pengolahan Hasil Perikanan Indonesia. 17(1): 80-91.
- Harijanto, E. A., & Dewajanti, A. M. (2017). Optimalisasi Pemberian Streptozotocin Beberapa Dosis terhadap Peningkatan Kadar Gula Darah Tikus Sprague dawley. Jurnal Kedokteran Meditek. 23(63): 12–18.
- Hestianah, E.P, Chairul, A, Suryo, K, Lita R.Y. 2018. Histologi Veteriner Jilid 1. Airlangga University Press. Surabaya.
- Hidayat, S., Napitupulu., dan Rodame, M. 2015. Kitab Tumbuhan Obat. Jakarta. Agriflo.
- Husnasya, D., M. Ihsan. 2018. Tingkat Rasionalitas Pendosisan Obat Berdasarkan Persamaan Jelliffe pada Pasien dengan Acute Kidney Injury. JMPF. 8(4): 175 -188.
- IDAI. 2009. Pedoman Pelayanan Medis. Jakarta: IDAI.
- International Diabetes Federation. 2017. IDF Diabetes Atlas – 8<sup>th</sup> edition. Brussels: International Diabetes Federation.
- International Diabetes Federation. 2019. IDF Diabetes Atlas – 9<sup>th</sup> edition. Brussels: International Diabetes Federation.
- Jayanti, E. 2015. Visualisasi Deposit Logam Berat Timbel (Pb) pada Organ Hepar Ikan Bandeng (*Chanos-chanos*) dengan Pewarnaan Rhodizonate Melalui Metode Histoteknik [Skripsi]. Program Studi Kedokteran Hewan Universitas Hasanuddin. Makassar
- Jin, R.C., J. Loscalzo. 2010. Vascular Nitric Oxide: Formation And Function. Jurnal of Blood Medecine. 1:147-162
- Junqueira, L.C. and Mescher, A.L. 2013. Junqueira's Basic Histology: Text & Atlas/Anthony L. Mescher. New York [etc]. McGraw-Hill Medical.
- Kalista, A.V. 2019. Uji Sitotoksitas Ekstrak Daun Kembang Bulan (*Tithonia diversifolia*) Terhadap *Bone Marrow Mesenchymal Stem Cell* (BSMC) Tikus dengan Metode *MTT Assay*. [Skripsi]. Fakultas Kedokteran Hewan. Universitas Airlangga Surabaya.

- Kartika, A. A., Siregar, H. C. H., dan Fuah, A. M. 2013. Strategi Pengembangan Usaha Ternak Tikus (*Rattus norvegicus*) Dan Mencit (*Mus musculus*) Di Fakultas Peternakan IPB. Bogor. Departemen Ilmu Produksi dan Teknologi Peternakan, Fakultas Peternakan, Institut Pertanian Bogor.
- Katzung, B. G., B.M. Susan., J.T. Anthony. 2015. Basic & Clinical Pharmacology. 13th Edition. New York: McGraw-Hill.
- Kemenkes RI. 2018. Hasil Utama Riset Kesehatan Dasar Tahun 2018. Jakarta Selatan: Kementerian Kesehatan Republik Indonesia.
- Krishnan, N., & Perazella, M. A. 2015. Drug-induced Acute Interstitial Nephritis. 9(1): 3–13.
- Kusriningrum, R.S. 2008. Perancangan Percobaan. Airlangga University Press, Surabaya. Hal.82.
- Kusuma, A.M., Asarina Y., Rahmawati, Y.I. 2016. Efek ekstrak bawang dayak (*Eleutherine palmifolia* (L.)Merr) dan ubi ungu (*Ipomoea batatas* L.) terhadap penurunan kadar kolesterol dan trigliserida darah pada tikus jantan. Jurnal Kefarmasian Indonesia. 6(2):108-116.
- Liasu, M. and Ayandele, A. 2008. Antimicrobial Activity of Aqueous and Ethanolic Extracts from *Tithonia diversifolia* and *Bryum Coronatum* Collected from Ogbomoso, Oyo State, Nigeria. Advances in Natural and Applied Sciences. 2(1): 31-34.
- Lubis, I., Rahmat, M. M., dan Raharjo. 2015. Akibat Aplikasi Simvastatin Pada Proses Penyembuhan Tulang Terhadap Ekspresi Kolagen Tipe 1 (Pada Binatang Coba Tikus Diabetes Melitus Tipe 1). Jurnal Kedokteran Gigi. 6(4): 340-346.
- Magee, C., Grieve, D. J., Watson, C. J., & Brazil, D.P. 2017. Diabetic Nephropathy: a Tangled Web to Unweave. Cardiovascular Drug Therapy. 31: 579-592.
- Mahmoodnia, L. et al., 2017. An Update on Diabetic Kidney Disease, Oxidative Stress and Antioxidant Agents, Journal of Renal Injury Prevention. 6(2): 153-157.
- Marianne, Yuandani and Rosnani. 2011. Antidiabetic Activity From Ethanol Extract of Kluwih's Leaf (*Artocarpus camansi*). Jurnal Natural. 11(2): 64–68.
- Mattin, M., O'Neill, D, and Church, D. 2014. An epidemiological study of diabetes mellitus in dogs attending first opinion practice in the UK. Vet Rec. 174(349).

- McGavin, M.D., Lopez, A. dan Zachary, J.F. 2007. Pathologic Basis of Veterinary Disease
- Middleton, E. Jr., Kandaswami, C., and Theoharides, T. C. 2000. The Effects Of Plant Flavonoids On Mammalian Cells: Implications For Inflammation, Heart Disease, and Cancer. *Pharmacology Review*. 52: 673–751.
- Mitchell R., Kumar V., Abbas A. K. et al. 2015. Inflammation and Repair. Robbins and Cotran Pathologic Basis Of Disease. Philadelphia: Elsevier Saunders.
- Mohamed, J. 2016. Mechanisms of Diabetes-Induced Liver Damage The role of oxidative stress and inflammation. *Sultan Qaboos University Medical Journal*. 2016 May. 16(2): 132–141.
- Mukhriani. 2014. Ekstraksi, Pemisahan Senyawa, dan Identifikasi Senyawa Aktif. *Jurnal Kesehatan*. 7(2).
- Myers, P., Espinosa, R., Parr, C.S., Jones, T., Hammond, G.S., and Dewey, T.A. 2019. *Rattus norvegicus brown rat*. Animal Diversity Web: [https://animaldiversity.org/accounts/Rattus\\_norvegicus/classification](https://animaldiversity.org/accounts/Rattus_norvegicus/classification). [8 Juli 2020].
- Nakagawa, H., S. Maeda. 2012. Molecular mechanisms of liver injury and hepatocarcinogenesis: Focusing on the role of stress-activated MAPK. *Patholog Res Int*.
- National Parks Board. 2013. Nparks Flora and Fauna Web. Singapore: Nparks Annual Report.
- Olayinka., Raiyemo., and Etejere. 2015. Phytochemical And Proximate Composition Of *Tithonia Diversifolia* (Hemsl.) A.Grey. Ilorin, Nigeria. University of Ilorin.
- Ozougwu, J.C., Obimba, K.C., Belonwu, C.D., and Unakalamba, C.B. 2013. The Pathogenesis and Pathophysiology of Type 1 and Type 2 Diabetes Mellitus. *Journal of Physiology and Pathology*. 4(4):46-57.
- Palsamy, P., S. Sivakumar., S. Subramanian. 2010. Resveratrol attenuates hyperglycemia-mediated oxidative stress, proinflammatory cytokines and protects hepatocytes ultrastructure in streptozotocin-nicotinamide-induced experimental diabetic rats. *Chem Biol Interact*. 186: 200–10.

- Passoni F.D., Oliveira R.B., Aparecida D., and Da Costa F.B. 2013. Repeated-dose toxicological studies of *Tithonia diversifolia* (Hemsl.) A. gray and identification of the toxic compounds. *Journal of Ethnopharmacology*. 147(2): 389-394.
- Perkumpulan Endokrinologi Indonesia (PERKENI). 2015. Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia. Jakarta. PB. PERKENI.
- Pober, J.S., and Sessa, W.C. 2015. Inflammation and the Blood Microvascular System. *Cold Spring Harb Perspect Biol*. 7(1).
- Pradiningsih, A., Pandanwangi, S., dan Aribowo. 2017. Pengaruh Ekstrak Daun Kembang Bulan (*Tithonia diversifolia* A.Gray) Terhadap Kadar Glukosa Darah Tikus Putih Wistar Yang Diinduksi Oleh Alokan. Cirebon. *Journal of Holistic and Health Sciences*. 1(2).
- Prasetyo, A., Tiara G.D., Widiayu S.P., Muhammad I.I. 2016. Perbandingan Efek Hipoglikemik Infusa Daun Kembang Bulan (*Tithonia diversifolia* (Hamsley) A. Gray) dan Metformin pada Tikus yang Diinduksi Alokan. *CDK Journal*-237. 43(2).
- Pratiwi, A.A. 2015. Pengaruh Pemberian Ekstrak Bawang Merah (*Allium ascalonicum* L.) Terhadap Penurunan Kadar Glukosa Darah Tikus (*Rattus norvegicus*) Yang Diinduksi Alloxan [Skripsi]. Fakultas Kedokteran Hewan. Universitas Airlangga. Hal. 17.
- Price, S.A. dan Wilson, L.M. 2006. Patofisiologi Konsep Klinis Proses-Proses Penyakit (Pathophysiology: Clinical Concepts of Disease Processes). Penerbit Buku Kedokteran EGC. Jakarta. 6(1): 182219.
- Putra, R. J. S., Achmad, A., Hananditia, R. P. 2017. Kejadian Efek Samping Potensial Terapi Obat Anti Diabetes Pasien Diabetes Melitus Berdasarkan Algoritma Naranjo. *Jurnal Kefarmasian Indonesia*. 2(2): 45-50.
- Ridwan E. 2013. Etika pemanfaatan hewan percobaan dalam penelitian kesehatan. *Medical Journal of Indonesia*. 63(3): 112-116.
- RISKESDAS. 2018. Hasil Utama Riskesdas Tentang Prevalensi Diabetes Mellitus di Indonesia 2018. Jakarta. Badan Penelitian Dan Pengembangan Kesehatan Departemen Kesehatan Republik Indonesia.
- Robinson, W.F., N.A. Robinson., M.G. Maxie., Jubb., Kennedy., Palmer's. 2016. *Pathology of Domestic Animals*. St. Louis, MO: Elsevier.
- Sari, A. R., Saraswati, T. R., & Yuniwanti, E. Y. W. 2018. Antihyperglycemic Activity of Aqueous Extract of Insulin Leaves (*Tithonia diversifolia*) on

- Hyperglycemic Rats (*Rattus norvegicus*). Biosaintifika: Journal of Biology & Biology Education. 10(3). 636–641.
- Sasmita, F. W., Susetyarini, E., Husamah, H., dan Pantiwati, Y. 2017. Efek Ekstrak Daun Kembang Bulan (*Tithonia diversifolia*) terhadap Kadar Glukosa Darah Tikus Wistar (*Rattus norvegicus*) yang Diinduksi Alloxan. Jakarta. Biosfera Press.
- Sharma A., 2012. Transdermal Approach of Antidiabetic Drug Glibenclamide: A Review. International Journal of Pharmaceutical Research and Development. Vol. 3(11): 25-32.
- Shi, Y.C., J.W. Liao., T.M. Pan.2011. Antihypertriglyceridemia and Anti-Inflammatory Activities of *Monascus*-Fermented *Dioscorea* in Streptozotocin-Induced Diabetic Rats. Hindawi Publishing Corporation.
- Sifuentes-Franco, S., Pacheco-Moises, F. P., Rodriguez-Carrizalez, A. D., & Miranda-Diaz, A. G., 2017. The Role of Oxidative Stress, Mitochondrial Function, and Autophagy in Diabetic Polyneuropathy. Journal of Diabetes Research.
- Snell, R. S. 2014. Clinical Anatomy by Systems. Lippincott Williams & Wilkins.
- Soenarto. 2014. Buku Ajar Ilmu Penyakit Dalam Edisi IV Jilid 1. Jakarta: Interna Publishing.
- Tavafi, M., 2013. Complexity of Diabetic Nephropathy Pathogenesis and Design of Investigations, Journal of Renal Injury Prevention. 2(2): 59-62.
- Triplitt C.L., Reasner C.A. and Isley W.C., 2008. Chapter 77: Diabetes Mellitus. In: (Dipiro JT, Talbert RL, Yee GC, Wells BG and Posey LM Eds). Pharmacotherapy A Pathophysiologic Approach. 7th ed. New York: Mc Graw-Hill Companies, Inc.
- Tsung, A., J.R. Klune, X. Zhang, G. Jeyabalan., Z. Cao. 2007. HMGB1 release induced by liver ischemia involves Toll-like receptor 4-dependent reactive oxygen species production and calcium-mediated signaling. J. Exp. Med. 204: 2913-2923.
- United States Departement of Agriculture (USDA). 2015. The PLANTS Database National Plant Data Team. Greensboro. USA.
- Valentovic, M. A., Alejandro, N., Betts Carpenter, A., Brown, P. I., & Ramos, K. 2006. Streptozotocin (STZ) diabetes enhances benzo(alpha)pyrene induced renal injury in Sprague Dawley rats. Toxicology Letters. 164(3): 214–220.

- Vinagayam, R., and Xu, B. 2015. Antidiabetic Properties of Dietary Flavonoids: a Cellular Mechanism Review. *Nutrition & Metabolism*, 12(1), 60-79.
- World Health Organization Global Report. 2019. World Health Organization Global Report On Diabetes. France. WHO Press.
- Yaturu S. 2011. Obesity and type 2 diabetes. *J. Diabetes Mellitus*.1(4):10-6.
- Zainuri M., Septelia Inawati Wanandi. 2012. Aktivitas Spesifik MnSOD dan Katalase pada hati Tikus yang diinduksi hipoksia sistemik : hubungannya dengan kerusakan oksidatif. *Media Litbang Kesehatan*. 22(2). Kemenkes RI. Jakarta.
- Zhang X., Wu X., Hu Q. et al. 2019. Mitochondrial DNA in Liver Inflammation and Oxidative Stress. *Life Sciences*. 236: 1-35.
- Zulkifli, Jangga, dan Muchlis, M. 2017. Uji Efek Antidiare Ekstrak Daun Prasman (*Eupatorium triplinerve* Vahl.) Terhadap Tikus Galur Wistar (*Rattus norvegicus*). *Majalah Farmasi*. 14(1).